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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/970,921

DATE: 10/19/2001
TIME: 10:37:39

Input Set : A:\2428-0108P.txt
Output Set: N:\CRF3\10192001\I970921.raw

3 <110> APPLICANT: Frank Michiels et al.
 5 <120> TITLE OF INVENTION: Improved Barstar Gene
 7 <130> FILE REFERENCE: 2428-0108P
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/970,921 of
 10 <141> CURRENT FILING DATE: 2001-10-05
 12 <160> NUMBER OF SEQ ID NOS: 10
 14 <170> SOFTWARE: PatentIn Ver. 2.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 270
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Bacillus amyloliquefaciens
 21 <220> FEATURE:
 22 <221> NAME/KEY: misc_feature
 23 <222> LOCATION: (1)..(270)
 24 <223> OTHER INFORMATION: CDS, function = "inhibitor of barnase", product =
 25 "barstar"
 27 <400> SEQUENCE: 1
 28 atgaaaaaaag cagtcatataa cggggaaacaa atcagaagta tcagcgacct ccaccagaca 60
 29 ttgaaaaagg agcttgccct tccggaatac tacggtgaaa acctggacgc tttatggat 120
 30 tgtctgaccg gatgggtgga gtacccgctc gttttggaat ggaggcagg tgaacaaagc 180
 31 aagcagctga ctgaaaatgg cgccgagagt gtgcttcagg tttccgtga agcggaaagcg 240
 32 gaaggctgctg acatcaccat catactttct 270
 34 <210> SEQ ID NO: 2
 35 <211> LENGTH: 90
 36 <212> TYPE: PRT
 37 <213> ORGANISM: Artificial Sequence C
 39 <220> FEATURE:
 40 <223> OTHER INFORMATION: Description of Artificial Sequence: protein
 42 <400> SEQUENCE: 2
 43 Met Lys Lys Ala Val Ile Asn Gly Glu Gln Ile Arg Ser Ile Ser Asp
 44 1 5 10 15
 46 Leu His Gln Thr Leu Lys Lys Glu Leu Ala Leu Pro Glu Tyr Tyr Gly
 47 20 25 30
 49 Glu Asn Leu Asp Ala Leu Trp Asp Cys Leu Thr Gly Trp Val Glu Tyr
 50 35 40 45
 52 Pro Leu Val Leu Glu Trp Arg Gln Phe Glu Gln Ser Lys Gln Leu Thr
 53 50 55 60
 55 Glu Asn Gly Ala Glu Ser Val Leu Gln Val Phe Arg Glu Ala Lys Ala
 56 65 70 75 80
 58 Glu Gly Cys Asp Ile Thr Ile Ile Leu Ser
 59 85 90
 62 <210> SEQ ID NO: 3
 63 <211> LENGTH: 273
 64 <212> TYPE: DNA
 65 <213> ORGANISM: Artificial Sequence
 67 <220> FEATURE:
 68 <223> OTHER INFORMATION: Description of Artificial Sequence: other nucleic

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69 acid, "improved barstar DNA"
71 <220> FEATURE:
72 <221> NAME/KEY: misc_feature
73 <222> LOCATION: (1)..(273)
74 <223> OTHER INFORMATION: CDS
76 <400> SEQUENCE: 3
77 atggccaaga aggctgtcat caacggggag cagatcagga gcatcagcga cctccaccag 60
78 accctcaaga aggagcttgc cttccggag tactacggtg agaacctoga cgcctctgg 120
79 gactgcctca cggctgggt ggagtacccc ctcgtttgg agtggaggca gttcagcag 180
80 agcaaggcgc tcaccgagaa cggcgccgag agcgtgtcc aagtgttcaag ggaggccaag 240
81 gccgagggct gcgacatcac catcatcctc tcc 273
83 <210> SEQ ID NO: 4
84 <211> LENGTH: 91
85 <212> TYPE: PRT
86 <213> ORGANISM: Artificial Sequence
88 <220> FEATURE:
89 <223> OTHER INFORMATION: Description of Artificial Sequence: protein ✓
91 <400> SEQUENCE: 4
92 Met Ala Lys Lys Ala Val Ile Asn Gly Glu Gln Ile Arg Ser Ile Ser
93 1 5 10 15
95 Asp Leu His Gln Thr Leu Lys Lys Glu Leu Ala Leu Pro Glu Tyr Tyr
96 20 25 30
98 Gly Glu Asn Leu Asp Ala Leu Trp Asp Cys Leu Thr Gly Trp Val Glu
99 35 40 45
101 Tyr Pro Leu Val Leu Glu Trp Arg Gln Phe Glu Gln Ser Lys Gln Leu
102 50 55 60
104 Thr Glu Asn Gly Ala Glu Ser Val Leu Gln Val Phe Arg Glu Ala Lys
105 65 70 75 80
107 Ala Glu Gly Cys Asp Ile Thr Ile Ile Leu Ser
108 85 90
111 <210> SEQ ID NO: 5
112 <211> LENGTH: 4032
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: Description of Artificial Sequence: other nucleic
118 acid, "plasmid pMV71"
120 <220> FEATURE:
121 <221> NAME/KEY: misc_feature
122 <222> LOCATION: (1999)..(3400)
123 <223> OTHER INFORMATION: label = PRAC1, "promoter region of rice actin gene
124 - contains an intron in the leader"
126 <220> FEATURE:
127 <221> NAME/KEY: misc_feature
128 <222> LOCATION: (3401)..(3676)
129 <223> OTHER INFORMATION: label = barstar, "barstar DNA"
131 <220> FEATURE:
132 <221> NAME/KEY: misc_feature
133 <222> LOCATION: (3677)..(4003)

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186 ttaagtttat tcgctttgg aaatgcataat ctgtatttga gtcgggttt aagttcgaaa 2280
 187 gctttgtaa atacagaggg atttgtataaa gaaatataatctt taaaaaaaaacc catatgctaa 2340
 188 tttgacataaa ttttgagaa aataatataat tcagggcaat tctcacaatg aacaataata 2400
 189 agattaaaat agcttcccc cgttgcagcg catgggtatt ttttctagta aaaataaaaag 2460
 190 ataaaacttag actcaaaaaca tttacaaaaa caacccctaa agttcctaaa gcccaaagtg 2520
 191 ctatccacga tccatagcaa gcccagccca acccaaccca acccaaccca ccccaagtcca 2580
 192 gccaactgga caatagtctc cacacccccc cactatcacc gtgagttgtc cgcacgcacc 2640
 193 gcacgtctcg cagccaaaaa aaaaaaaaaaaga aagaaaaaaa agaaaaaagaa aaaacagcag 2700
 194 gtgggtccgg gtcgtggggg ccggaaacgc gaggaggatc gcgagccagc gacgaggccg 2760
 195 gcccctccctc cgcttccaaa gaaacgcccc ccatacgccac tatatacata cccccccctc 2820
 196 tcctcccatc ccccaaccc taccaccacc accaccacca cctccaccc cttcccttc 2880
 197 gtcgggac gacgagctcc tccccccctcc ccctccggcc cccggcgcc ggttaaccacc 2940
 198 ccccccctct cctctttctt tctccgttt tttttccgt ctgggtctcg atctttggcc 3000
 199 ttggtagttt gggtgggcga gaggcgggtt cgtgcgcgc cagatcggtg cgccggaggg 3060
 200 gcccggatctc gcccgtgggg ctctcgccgg cgtggatccg gcccggatct cgcggggaaat 3120
 201 ggggctctcg gatgttagatc tgcgtatccgc cgttgggtttt ggagatgtatg ggggggtttaa 3180
 202 aatttccgccc atgctaaaca agatcaggaa gaggggaaaa gggcactatg gtttatattt 3240
 203 ttatatatattt ctgctgtttc gtcaggctta gatgtgttag atctttctt cttctttttt 3300
 204 tgggttagaat ttgaatccct cagcattttt catcggtatg ttttctttc atgatttgtg 3360
 205 acaaatgcag cctcgtgcgg agctttttt taggttagacc atggccaaaa aagcagtcat 3420
 206 taacggggaa caaatcagaa gtatcagcga cctccaccag acattgaaaa aggagcttgc 3480
 207 ccttccggaa tactacggtg aaaaccttggc cgctttatgg gattgtctga ccggatgggt 3540
 208 ggagtacccg ctcgtttgg aatggaggca gtttgaacaa agcaagcagc tgactgaaaa 3600
 209 tggcgccgag agtgtgtttc aggtttccg tgaagcgaaa gcggaaaggct ggcacatcac 3660
 210 catcatactt tcttaataacg atcaatggga gatgaacaaat atggaaacac aaacccgcaa 3720
 211 gctagcttgg ctcttagagga tccgaagcag atcgttcaaa catttggcaa taaagttct 3780
 212 taagattgaa tcctgttgcc ggtcttgcga tgattatcat ataatttctg ttgaattacg 3840
 213 ttaagcatgt aataatttac atgtatgtca tgacgttatt tatgagatgg gtttttatga 3900
 214 ttagagtccc gcaattataac attaataacg cgatagaaaa caaaatatacg cgccaaact 3960
 215 aggataaaattt atcgcgcgcg gtgtcatcta tgttactaga tcgggaagat ccccggtac 4020
 216 cgagctcgaa tt 4032

218 <210> SEQ ID NO: 6

219 <211> LENGTH: 563

220 <212> TYPE: DNA

221 <213> ORGANISM: Artificial Sequence ✓

223 <220> FEATURE:

224 <223> OTHER INFORMATION: Description of Artificial Sequence: other nucleic acid, "part of plasmid pLH43"

225 <220> FEATURE:

226 <221> NAME/KEY: misc_feature

227 <222> LOCATION: (1)..(6)

228 <223> OTHER INFORMATION: label = NcoI, "NcoI recognition site"

229 <220> FEATURE:

230 <221> NAME/KEY: misc_feature

231 <222> LOCATION: (3)..(278)

232 <223> OTHER INFORMATION: label = synb*, "improved barstar DNA"

233 <220> FEATURE:

234 <221> NAME/KEY: misc_feature

235 <222> LOCATION: (279)..(545)

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240 <223> OTHER INFORMATION: label = 3'nos, "region containing 3' untranslated
241 end of nopaline synthase gene of Agrobacterium
242 T-DNA"
244 <220> FEATURE:
245 <221> NAME/KEY: misc_feature
246 <222> LOCATION: (558)..(563)
247 <223> OTHER INFORMATION: label = KpnI, "KpnI recognition site"
249 <400> SEQUENCE: 6
250 ccatggccaa gaaggctgtc atcaacgggg agcagatcg gagcatcagc gacctccacc 60
251 agaccctcaa gaaggagctt gcccttcgg agtactacgg tgagaacctc gacgcctct 120
252 gggactgcct caccggctgg gtggagtacc ccctcgtgtt ggagtggagg cagttcgagc 180
253 agagcaagca gctcaccggag aacggcgccg agagcgtgct ccaagtgttc agggaggcca 240
254 agggcgaggg ctgcgacatc accatcatcc tctcctgtat gatccgaagc agatcggtca 300
255 aacatttggc aataaagttt cttaagattt aatcctgttg ccgtcttgc gatgattatc 360
256 atataatttc tgttgaatta cgttaagcat gtaataatta acatgtatg catgacgtta 420
257 tttatgagat gggttttat gattagatc ccgcaattat acatthaata cgcgatagaa 480
258 aacaaaatatac agcgccgcaaa ctaggataaa ttatcgccgcg cggtgtcatc tatgttacta 540
259 gatcgccgaaat atccccgggt acc 563
261 <210> SEQ ID NO: 7
262 <211> LENGTH: 5349
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence ✓
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence: other nucleic acid, "T-DNA of pTTS243" ✓
270 <220> FEATURE:
271 <221> NAME/KEY: misc_feature
272 <222> LOCATION: Complement((1)..(25))
273 <223> OTHER INFORMATION: label = RB, "T-DNA right border"
275 <220> FEATURE:
276 <221> NAME/KEY: misc_feature
277 <222> LOCATION: Complement((98)..(331))
278 <223> OTHER INFORMATION: label = 3'g7, "region containing 3' untranslated end of Agrobacterium T-DNA gene 7"
281 <220> FEATURE:
282 <221> NAME/KEY: misc_feature
283 <222> LOCATION: Complement((332)..(883))
284 <223> OTHER INFORMATION: label = bar, "region coding for phosphinhydrin acetyl transferase"
287 <220> FEATURE:
288 <221> NAME/KEY: misc_feature
289 <222> LOCATION: Complement((884)..(2258))
290 <223> OTHER INFORMATION: label = P35S, "35S promoter of Cauliflower Mosaic Virus"
293 <220> FEATURE:
294 <221> NAME/KEY: misc_feature
295 <222> LOCATION: (2281)..(3969)
296 <223> OTHER INFORMATION: label = PE1, "promoter of E1 gene of rice (WO 92/13956)"
297

VERIFICATION SUMMARY
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L:9 M:270 C: Current Application Number differs, Replaced Current Application Number